

#11



PCT09

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/914,106B

DATE: 10/24/2002

TIME: 15:50:02

Input Set : A:\20397P - sequence listing.txt

Output Set: N:\CRF4\10242002\I914106B.raw

ENTERED

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4 <110> APPLICANT: Howard, Andrew D.
5     O'Neill, Gary P.
6     O'Dowd, Brian
7     George, Susan
9 <120> TITLE OF INVENTION: G PROTEIN-COUPLED RECEPTOR
10    RESEMBLING-GALANIN RECEPTORS
12 <130> FILE REFERENCE: 20397P
14 <140> CURRENT APPLICATION NUMBER: 09/914,106B
15 <141> CURRENT FILING DATE: 2001-08-23
17 <150> PRIOR APPLICATION NUMBER: PCT/US00/04416
18 <151> PRIOR FILING DATE: 2000-02-22
20 <150> PRIOR APPLICATION NUMBER: 60/121,651
21 <151> PRIOR FILING DATE: 1999-02-24
23 <160> NUMBER OF SEQ ID NOS: 12
25 <170> SOFTWARE: FastSEQ for Windows Version 4.0
27 <210> SEQ ID NO: 1
28 <211> LENGTH: 1197
29 <212> TYPE: DNA
30 <213> ORGANISM: Homo Sapiens
32 <400> SEQUENCE: 1
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34 ggctgcccgg gctgtggcgc caacgcctcg gacggcccag tcccttcgcc gcggggccgtg      120
35 gacgcctggc tcgtgccgct cttcttcgcg gcgctgatgc tgcctggcct ggtggggaac      180
36 tcgctggtca tctacgtcat ctgccgccac aagccgatgc ggaccgtgac caactttctac      240
37 atcgccaacc tggcggccac ggacgtgacc ttctcctgtg gctgcgtccc cttcacggcc      300
38 ctgctgtacc cgtgcccggg ctgggtgctg ggcgacttca tgtgcaagtt cgtcaactac      360
39 atccagcagg tctcggtgca ggccacgtgt gccactctga ccgccatgag tgtggaccgc      420
40 tggtaactga cgggtgtccc gttgcgcgcc ctgcaccgcc gcacgccccg cctggcgctg      480
41 gctgtcagcc tcagcatctg ggtaggctct gcggcggtgt ctgcgccggt gctcgccctg      540
42 caccgcctgt caccggggcc gcgcgcctac tgcagttagg ccttccccag ccgcgccctg      600
43 gagegcgcct tcgcaactga caactgctg gcgctgtacc tgcctgcctg gctcgcacc      660
44 tgcgcctgct atgcggccat gctgcgccac ctgggcccgg tcgcccgtgc ccccgcgccc      720
45 gccgatagcg cctgtcaggg gcaggtgctg gcagagcgcg caggcgccgt gcgggccaaag      780
46 gtctcgcgcc tgggtggcggc cgtggtcctg ctcttcgcgc cctgctgggg ccccatccag      840
47 ctgttcctgg tgcctcaggg gctgggcccc gcgggctcct ggcacccacg cagctacgcc      900
48 gcctacgcgc ttaagacctg ggtcactgct atgtcctaca gcaactccgc gctgaacccg      960
49 ctgctctacg ccttcctggg ctgcgacttc cgacagacct tccgcccggt ctgcccctgc     1020
50 gcgcgcgcgc gccccgcgcg cccccgcgcg cccggacctc cggaccccgc agccccacac     1080
51 gcggagctgc tccgcctggg gtcccaccgc gccccgccca gggcgagaaa gccagggagc     1140
52 agtgggctgg ccgcgcgcgg gctgtgcgtc ctgggggagg acaacgcccc tctctga      1197
54 <210> SEQ ID NO: 2
55 <211> LENGTH: 1254
56 <212> TYPE: DNA

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57 <213> ORGANISM: Rattus Rattus

59 <400> SEQUENCE: 2

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60 ccacagtccc aggacgcaat ctgtgaaggc tgcctggagg aggaggagg cgacagggcc      60
61 atggccgcag aggcgacgtt gggccgaac gtgagctggt gggctccgtc caacgcttcg      120
62 ggatgcccgg gctgcggtgt caatgcctcg gatggcccag gctccgcgcc aaggcccctg      180
63 gatgcctggc tggtgccctt gtttttcgct gccctaattg tgctggggct agtcgggaac      240
64 tcactggtca tcttcgttat ctgccgccac aagcacatgc agaccgtcac caatttctac      300
65 atcgctaacc tggcggccac agatgtcact ttccttctgt gctgcgtacc cttaccgcg      360
66 ctctctatc cgtgcctcac ctgggtgctg ggagacttca tgtgcaaatt cgtcaactac      420
67 atccagcagg tctcggtgca agccacatgt gccactttga cagccatgag tgtggaccgc      480
68 tggtaactga ctgtgttccc gctgcgtgca cttaccgcgc gactccgcg cctggccctg      540
69 actgtcagcc ttagcatctg ggtgggttcc gcagctgttt ccgcccgggt gctggctctg      600
70 caccgcctgt cgcgcgggcc tcacacctac tgcaagtagg cgtttcccag ccgtgccctg      660
71 gagcgcgctt tcgcgtcta caacctgctg gccctatacc tgctgccgct gctcgccacc      720
72 tgcgctgct acggtgccat gctgcgccac ctggccgcgc ccgctgtacg ccccgaccc      780
73 actgatggcg ccctgcaggg gcagctgcta gcacagcgcg ctggagcagt gcgcaccaag      840
74 gtctcccggc tggtgccgcg tgcgtcctg ctcttcgcgc cctgctgggg cccgatccag      900
75 ctgttccctg tgcttcaagc cctgccgctc gggggcctgg caccctcgaa gctatgcgc      960
76 tacgcgtcca agatctgggc tcactgcatt tcctacagca attctgcgct caaccgctg      1020
77 ctctatgcct tcctgggttc ccacttcaga caggccttct gccgcgtgtg cccctgcggc      1080
78 ccgcaacgcc agcgtcggcc ccacgcgtca gcgcactcgg accgagccgc accccatagt      1140
79 gtgccgcaca gccgggctgc gcacctgtc cgggtcagga ccccgagcc tgggaaccct      1200
80 gtggtgcact cgcctctgtt tcaggatgaa cacactgccc cactctgagc tgcc      1254

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82 <210> SEQ ID NO: 3

83 <211> LENGTH: 398

84 <212> TYPE: PRT

85 <213> ORGANISM: Homo Sapiens

87 <400> SEQUENCE: 3

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88 Met His Thr Val Ala Thr Ser Gly Pro Asn Ala Ser Trp Gly Ala Pro
89 1          5          10          15
90 Ala Asn Ala Ser Gly Cys Pro Gly Cys Gly Ala Asn Ala Ser Asp Gly
91          20          25          30
92 Pro Val Pro Ser Pro Arg Ala Val Asp Ala Trp Leu Val Pro Leu Phe
93          35          40          45
94 Phe Ala Ala Leu Met Leu Leu Gly Leu Val Gly Asn Ser Leu Val Ile
95          50          55          60
96 Tyr Val Ile Cys Arg His Lys Pro Met Arg Thr Val Thr Asn Phe Tyr
97 65          70          75          80
98 Ile Ala Asn Leu Ala Ala Thr Asp Val Thr Phe Leu Leu Cys Cys Val
99          85          90          95
100 Pro Phe Thr Ala Leu Leu Tyr Pro Leu Pro Gly Trp Val Leu Gly Asp
101          100          105          110
102 Phe Met Cys Lys Phe Val Asn Tyr Ile Gln Gln Val Ser Val Gln Ala
103          115          120          125
104 Thr Cys Ala Thr Leu Thr Ala Met Ser Val Asp Arg Trp Tyr Val Thr
105          130          135          140
106 Val Phe Pro Leu Arg Ala Leu His Arg Arg Thr Pro Arg Leu Ala Leu
107 145          150          155          160
108 Ala Val Ser Leu Ser Ile Trp Val Gly Ser Ala Ala Val Ser Ala Pro

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109          165          170          175
110 Val Leu Ala Leu His Arg Leu Ser Pro Gly Pro Arg Ala Tyr Cys Ser
111          180          185          190
112 Glu Ala Phe Pro Ser Arg Ala Leu Glu Arg Ala Phe Ala Leu Tyr Asn
113          195          200          205
114 Leu Leu Ala Leu Tyr Leu Leu Pro Leu Leu Ala Thr Cys Ala Cys Tyr
115          210          215          220
116 Ala Ala Met Leu Arg His Leu Gly Arg Val Ala Val Arg Pro Ala Pro
117 225          230          235          240
118 Ala Asp Ser Ala Leu Gln Gly Gln Val Leu Ala Glu Arg Ala Gly Ala
119          245          250          255
120 Val Arg Ala Lys Val Ser Arg Leu Val Ala Ala Val Val Leu Leu Phe
121          260          265          270
122 Ala Ala Cys Trp Gly Pro Ile Gln Leu Phe Leu Val Leu Gln Ala Leu
123          275          280          285
124 Gly Pro Ala Gly Ser Trp His Pro Arg Ser Tyr Ala Ala Tyr Ala Leu
125          290          295          300
126 Lys Thr Trp Ala His Cys Met Ser Tyr Ser Asn Ser Ala Leu Asn Pro
127 305          310          315          320
128 Leu Leu Tyr Ala Phe Leu Gly Ser His Phe Arg Gln Ala Phe Arg Arg
129          325          330          335
130 Val Cys Pro Cys Ala Pro Arg Arg Pro Arg Arg Pro Arg Arg Pro Gly
131          340          345          350
132 Pro Ser Asp Pro Ala Ala Pro His Ala Glu Leu Leu Arg Leu Gly Ser
133          355          360          365
134 His Pro Ala Pro Ala Arg Ala Gln Lys Pro Gly Ser Ser Gly Leu Ala
135          370          375          380
136 Ala Arg Gly Leu Cys Val Leu Gly Glu Asp Asn Ala Pro Leu
137 385          390          395
139 <210> SEQ ID NO: 4
140 <211> LENGTH: 395
141 <212> TYPE: PRT
142 <213> ORGANISM: Rattus Rattus
144 <400> SEQUENCE: 4
145 Met Ala Ala Glu Ala Thr Leu Gly Pro Asn Val Ser Trp Trp Ala Pro
146 1          5          10          15
147 Ser Asn Ala Ser Gly Cys Pro Gly Cys Gly Val Asn Ala Ser Asp Gly
148          20          25          30
149 Pro Gly Ser Ala Pro Arg Pro Leu Asp Ala Trp Leu Val Pro Leu Phe
150          35          40          45
151 Phe Ala Ala Leu Met Leu Leu Gly Leu Val Gly Asn Ser Leu Val Ile
152          50          55          60
153 Phe Val Ile Cys Arg His Lys His Met Gln Thr Val Thr Asn Phe Tyr
154 65          70          75          80
155 Ile Ala Asn Leu Ala Ala Thr Asp Val Thr Phe Leu Leu Cys Cys Val
156          85          90          95
157 Pro Phe Thr Ala Leu Leu Tyr Pro Leu Pro Thr Trp Val Leu Gly Asp
158          100          105          110
159 Phe Met Cys Lys Phe Val Asn Tyr Ile Gln Gln Val Ser Val Gln Ala

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160          115          120          125
161 Thr Cys Ala Thr Leu Thr Ala Met Ser Val Asp Arg Trp Tyr Val Thr
162          130          135          140
163 Val Phe Pro Leu Arg Ala Leu His Arg Arg Thr Pro Arg Leu Ala Leu
164 145          150          155          160
165 Thr Val Ser Leu Ser Ile Trp Val Gly Ser Ala Ala Val Ser Ala Pro
166          165          170          175
167 Val Leu Ala Leu His Arg Leu Ser Pro Gly Pro His Thr Tyr Cys Ser
168          180          185          190
169 Glu Ala Phe Pro Ser Arg Ala Leu Glu Arg Ala Phe Ala Leu Tyr Asn
170          195          200          205
171 Leu Leu Ala Leu Tyr Leu Leu Pro Leu Leu Ala Thr Cys Ala Cys Tyr
172          210          215          220
173 Gly Ala Met Leu Arg His Leu Gly Arg Ala Ala Val Arg Pro Ala Pro
174 225          230          235          240
175 Thr Asp Gly Ala Leu Gln Gly Gln Leu Leu Ala Gln Arg Ala Gly Ala
176          245          250          255
177 Val Arg Thr Lys Val Ser Arg Leu Val Ala Ala Val Val Leu Leu Phe
178          260          265          270
179 Ala Ala Cys Trp Gly Pro Ile Gln Leu Phe Leu Val Leu Gln Ala Leu
180          275          280          285
181 Pro Leu Gly Gly Leu Ala Pro Ser Lys Leu Cys Ala Tyr Ala Leu Lys
182          290          295          300
183 Ile Trp Ala His Cys Met Ser Tyr Ser Asn Ser Ala Leu Asn Pro Leu
184 305          310          315          320
185 Leu Tyr Ala Phe Leu Gly Ser His Phe Arg Gln Ala Phe Cys Arg Val
186          325          330          335
187 Cys Pro Cys Gly Pro Gln Arg Gln Arg Arg Pro His Ala Ser Ala His
188          340          345          350
189 Ser Asp Arg Ala Ala Pro His Ser Val Pro His Ser Arg Ala Ala His
190          355          360          365
191 Pro Val Arg Val Arg Thr Pro Glu Pro Gly Asn Pro Val Val His Ser
192          370          375          380
193 Pro Ser Val Gln Asp Glu His Thr Ala Pro Leu
194 385          390          395
196 <210> SEQ ID NO: 5
197 <211> LENGTH: 346
198 <212> TYPE: PRT
199 <213> ORGANISM: Rattus Rattus
201 <400> SEQUENCE: 5
202 Met Glu Leu Ala Pro Val Asn Leu Ser Glu Gly Asn Gly Ser Asp Pro
203 1          5          10          15
204 Glu Pro Pro Ala Glu Pro Arg Pro Leu Phe Gly Ile Gly Val Glu Asn
205          20          25          30
206 Phe Ile Thr Leu Val Val Phe Gly Leu Ile Phe Ala Met Gly Val Leu
207          35          40          45
208 Gly Asn Ser Leu Val Ile Thr Val Leu Ala Pro Ser Lys Pro Gly Lys
209          50          55          60
210 Pro Arg Ser Thr Thr Asn Leu Phe Ile Leu Asn Leu Ser Ile Ala Asp

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```

211 65              70              75              80
212 Leu Ala Tyr Leu Leu Phe Cys Ile Phe Phe Gln Ala Thr Val Tyr Ala
213              85              90              95
214 Leu Pro Thr Trp Val Leu Gly Ala Phe Ile Cys Lys Phe Ile His Tyr
215              100              105              110
216 Phe Phe Thr Val Ser Met Leu Val Ser Ile Phe Thr Leu Ala Ala Met
217              115              120              125
218 Ser Val Asp Arg Tyr Val Ala Ile Val His Ser Arg Arg Ser Ser Ser
219              130              135              140
220 Leu Arg Val Ser Arg Asn Ala Leu Leu Gly Val Gly Phe Ile Trp Ala
221 145              150              155              160
222 Leu Ser Ile Ala Met Ala Ser Pro Val Ala Tyr Tyr Gln Arg Leu Phe
223              165              170              175
224 His Arg Asp Ser Asn Gln Thr Phe Cys Trp Glu His Trp Pro Asn Gln
225              180              185              190
226 Leu His Lys Lys Ala Tyr Val Val Cys Thr Phe Val Phe Gly Tyr Leu
227              195              200              205
228 Leu Pro Leu Leu Leu Ile Cys Phe Cys Tyr Ala Lys Val Leu Asn His
229              210              215              220
230 Leu His Lys Lys Leu Lys Asn Met Ser Lys Lys Ser Glu Ala Ser Lys
231 225              230              235              240
232 Lys Lys Thr Ala Gln Thr Val Leu Val Val Val Val Val Phe Gly Ile
233              245              250              255
234 Ser Trp Leu Pro His His Val Ile His Leu Trp Ala Glu Phe Gly Ala
235              260              265              270
236 Phe Pro Leu Thr Pro Ala Ser Phe Phe Arg Ile Thr Ala His Cys
237              275              280              285
238 Leu Ala Tyr Ser Asn Ser Ser Val Asn Pro Ile Ile Tyr Ala Phe Leu
239              290              295              300
240 Ser Glu Asn Phe Arg Lys Ala Tyr Lys Gln Val Phe Lys Cys Arg Val
241 305              310              315              320
242 Cys Asn Glu Ser Pro His Gly Asp Ala Lys Glu Lys Asn Arg Ile Asp
243              325              330              335
244 Thr Pro Pro Ser Thr Asn Cys Thr His Val
245              340              345
247 <210> SEQ ID NO: 6
248 <211> LENGTH: 372
249 <212> TYPE: PRT
250 <213> ORGANISM: Rattus Rattus
252 <400> SEQUENCE: 6
253 Met Asn Gly Ser Gly Ser Gln Gly Ala Glu Asn Thr Ser Gln Glu Gly
254 1              5              10              15
255 Gly Ser Gly Gly Trp Gln Pro Glu Ala Val Leu Val Pro Leu Phe Phe
256              20              25              30
257 Ala Leu Ile Phe Leu Val Gly Thr Val Gly Asn Ala Leu Val Leu Ala
258              35              40              45
259 Val Leu Leu Pro Gly Gly Gln Ala Val Ser Thr Thr Asn Leu Phe Ile
260              50              55              60
261 Leu Asn Leu Gly Val Ala Asp Leu Cys Phe Ile Leu Cys Cys Val Phe

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VERIFICATION SUMMARY

DATE: 10/24/2002

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Input Set : A:\20397P - sequence listing.txt

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